

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/511,296	10/15/2004	Dirk Petring	DE0301302	2161	
30008 75	590 11/17/2005		EXAM	EXAMINER	
GUDRUN E. HUCKETT DRAUDT LONSSTR. 53			HEINRICH, SAMUEL M		
WUPPERTAL,			ART UNIT	PAPER NUMBER	
GERMANY			1725		

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	$\overline{}$				
	Application No. 10/511,296	PETRING, DIRK					
Office Action Summary	Examiner	Art Unit					
,	~ 27	V_ V					
The MAILING DATE of this communication app	Samuel M. Heinrich	1725	drass				
Period for Reply	rears on the cover sheet with the c	orrespondence au	uiess				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DOWN THE MAILING DOWN THE MAILING DOWN THE STATE OF THE MAILING DOWN THE STATE OF THE MAILING DOWN THE STATE OF THE MAILING THE MAILI	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this co					
Status							
1) Responsive to communication(s) filed on							
	 action is non-final.						
· <u>—</u>		secution as to the	merits is				
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>22-47</u> is/are pending in the application	•						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)☐ Claim(s) is/are allowed. 6)⊠ Claim(s) <u>22-47</u> is/are rejected.							
7) Claim(s) is/are rejected.							
8) Claim(s) are subjected to.	r election requirement						
or claim(s) are subject to restriction and/o	r election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10)⊠ The drawing(s) filed on <u>15 October 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of:		-(d) or (f).	•				
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite	450)				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10152004</u> .	5) Notice of Informal P 6) Other:	atent Application (PTO	-102)				

Art Unit: 1725

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: The specification contains non idiomatic language. For instance, Page 2, paragraph 3, last line, "they can also can" is not clear language. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 22-27, 30-42, and 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 5,337,323 to Rokugawa et al or in view of JP02001347388A.

AAPA discloses (Specification pages 1-4) well known hybrid technology and describe (Specification page 2) well known pulse modulation for both temporal and permanent control. Rokugawa et al describe (BSTX 11) well known control means for both the master and slave laser elements "controlling a driving current for the slave semiconductor laser element by following the control of the driving current for the master semiconductor laser element." The use of synchronous master and slave control of AAPA hybrid systems would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because AAPA describes well known combinations of hybrid systems and pulse modulation and because

Art Unit: 1725

Rokugawa et al describe well known synchronized pulse modulation of plural laser sources.

JP02001347388A discloses well known laser machining comprising control means including a first triggering signal and a second triggering signal and wherein the second triggering signal has a waveform which is synchronized with the first triggering signal. The use of synchronous master and slave control of AAPA hybrid systems would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because AAPA describes well known combinations of hybrid systems and pulse modulation and because JP02001347388A describe well known synchronized pulse modulation of plural laser sources.

Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 5,337,323 to Rokugawa et al or in view of JP02001347388A as applied to claims 22 and 37 above, and further in view of USPN 4,817,106 to Thompson. Thompson describes master and slave laser interaction and describe both antiphase and in phase operation. The operation of AAPA in synchronous mode and in antiphase or in in phase operation would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because both operations are well known operating modes which provide different waveform modes.

Art Unit: 1725

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited art pertains to well known synchronization of multiple lasers and multiple pulse modulations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Samuel M Heinrich Primary Examiner

Samuel M. Heimich

Art Unit 1725